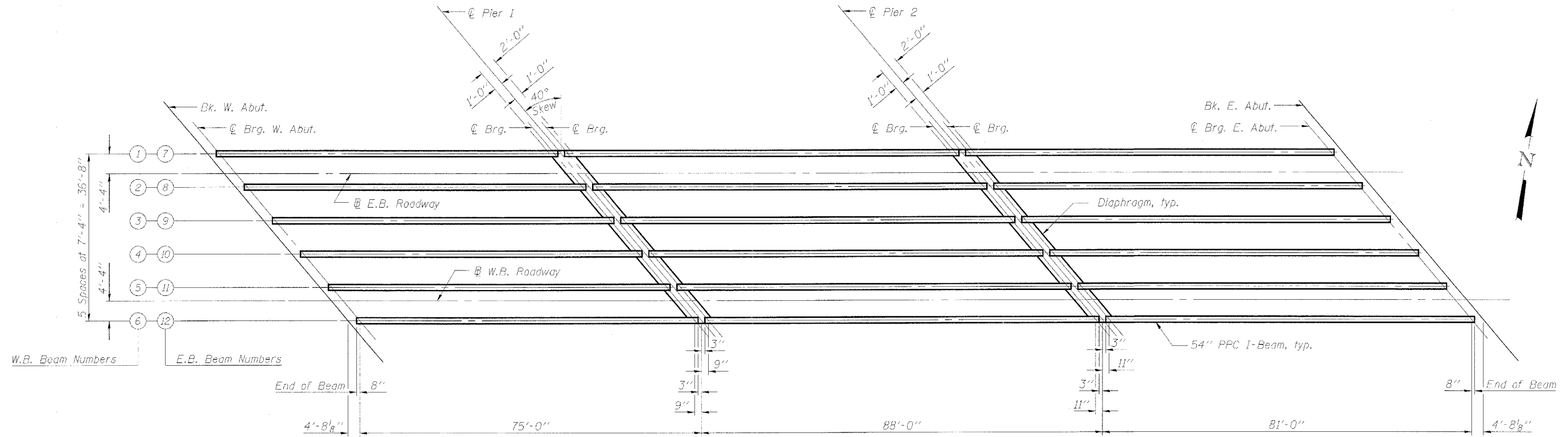


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13 36 SHEETS
F.A.P. 315	34-6, 55-1	HANCOCK	433	211	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #68206



PLAN

(E.B. Structure and W.B. Structure)

	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.6 Span 3
I	(in ⁴) 213715		213715		213715
I'	(in ⁴) 495935		495935		495935
S_b	(in ³) 8559		8559		8559
S_b'	(in ³) 12642		12642		12642
S_t	(in ³) 7362		7362		7362
S_t'	(in ³) 22269		22269		22269
DC1	(k/')		1.332		1.332
M DC1	(k)		1241.0		1025.0
DC2	(k/')	0.150	0.150	0.150	0.150
M DC2	(k)	97.4	41.9	109.2	74.4
DW	(k/')	0.333	0.333	0.333	0.333
M DW	(k)	216.5	93.1	242.6	165.3
M ₄ + Imp	(k)	1056.6	955.2	1113.3	1105.37

I and I' are the moment of inertia and composite moment of inertia of the beam section.

S_b and S_b' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.

S_t and S_t' are the non-composite and composite section modulus for the top fiber of the prestressed beam.

M_{Imp} is the moment due to live load impact on the composite section.

DC1 is the dead load acting on the non-composite section.

DC2 is the dead load acting on the long-term composite section.

DW is the dead load acting on the long-term composite section due to wearing surface.

	W. Abut.	Pier 1	Span 1	Pier 1	Span 2	Pier 2	Span 2	Pier 2	Span 3	E. Abut.
R DC1 (k)	54.7	49.5		57.5		63.3		59.1		58.5
R DC2+DW (k)	13.9	21.6		21.6		22.8		22.8		15.2
R ₄ (k)	76.4	54.3		54.3		56.1		56.1		78.8
R Imp (k)	19.3	10.9		10.9		11.2		11.2		19.8
R Total (k)	164.3	136.2		144.3		153.4		149.2		172.3

DESIGNED	KLH
CHECKED	EML
DRAWN	EML
CHECKED	KLH

HORNER & SHIFRIN, INC.
ENGINEERS ■ ARCHITECTS ■ PLANNERS

FRAMING PLAN
ILLINOIS ROUTE 336 OVER
EAST FORK OF THE LAMOINE RIVER
F.A.P. ROUTE 315 - SECTION 34-6, 55-1
HANCOCK COUNTY; STA. 1432+02.61
STRUCTURE NO. 034-0511 (E.B.)
STRUCTURE NO. 034-0512 (W.B.)